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Case No.: 55250US002RECEIVED  
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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: BENSON, GERALD M.

Application No.: 09/515978 Group Art Unit: 1772

Filed: February 25, 2000 Examiner: Alicia Ann Chevalier

Title: A COMPOUND MOLD AND STURCTURED SURFACE  
ARTICLES CONTAINING GEOMETRIC STRUCTURES WITH  
COMPOUND FACES AND METHOD OF MAKING SAMEREPLY BRIEFMail Stop: Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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1-4-2005 Date	<u>Judy X. Hansen</u> Signed by:

Dear Sir:

This is in reply to the Examiner's Answer mailed on November 4, 2004. The fee, if any, should be charged to Deposit Account No. 13-3723.

REAL PARTY IN INTEREST

The statement identifying the real party in interest contained in the Appeal Brief is correct.

RELATED APPEALS AND INTERFERENCES

Appellants are not aware of any related appeals or interferences.

STATUS OF CLAIMS

The Status Statement of the status of the claims contained in the Appeal Brief is correct.

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**STATUS OF AMENDMENTS**

The statement of the Status of the Amendments contained in the Appeal Brief is correct.

**SUMMARY OF INVENTION**

The summary of the invention contained in the Appeal Brief is correct.

**ISSUES**

The statement of the issues in the Appeal Brief are correct.

**GROUPING OF CLAIMS**

The grouping of the claims set forth in the Appeal Brief is correct.

**CLAIMS APPEALED**

The copy of the appealed claims contained in the Appendix to the Appeal Brief is correct.

**PRIOR ART OF RECORD**

The prior art identified in the Appeal Brief is the art of record.

**BASIS OF REJECTION**

The Examiner has, for the first time, provided a graphic explanation for her rejections. See Figures 1 and 2 of the Examiner's Answer. However, the Examiner's reasoning in support of her rejections does not support the rejections.

**(1) Definition of Machined Substrate/Portion**

The core of the Examiner's rejections are that Applicants have failed to define "machined substrate/portion." Accordingly, the Examiner has adopted the position that:

- (a) She is entitled to give these terms broadest possible reasonable interpretation in light of the specification; and
- (b) A machined substrate/portion is one made by a machine or a process that uses a machine.

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The Examiner says that (i) something made by using a mold is made by a machine and is a machined substrate/portion, and (ii) a metallic layer formed by a machine that can vacuum deposit the layer is a machined substrate/portion. See page 7 of the Examiner's Answer.

The logical result of the Examiner's position is that every structure disclosed in the references is a machined substrate/portion because each is made by a machine. This is in direct conflict with her rejections of claim 40 and claims 16-23 and 40. In each of these rejections the Examiner has argued that the references teach both a machined substrate/portion and a replicated substrate/portion. This is an admission that Applicants have defined "machined substrate/portion".

(2) Claim 40

The Examiner argues that claim 40 is anticipated under 35 USC 102(b) by Bacon, Jr., et al. (U.S. 5,614,286) because adjacent segments of the substrate are either "machined" or "replicated". See page 4 of the Examiner's Answer. This arbitrary designation of some segments in Bacon as being "machined" and others as being "replicated" is illogical and incorrect.

Bacon teaches that the structured surface is created at one time by a single method. This method is a replication process. The segments are subsequently created from the structured surface. As a result, the adjacent segments cannot be different from one another. That is, one cannot be machined and other replicated. They are either all machined or all replicated. However, using the Examiner's logic, the segments would all be machined because the structured surface was created by a "machine." For this reason, the rejection of claim 40 as being anticipated by Bacon fails because it does not teach the presence of both a machined substrate/portion and a replicated substrate/portion.

(3) Claims 16-23 and 40

The Examiner argues that claims 16-23 and 40 are anticipated under 35 USC 102(b) by Nilsen et al. (U.S. 5,657,162) because the vapor coated portions of the substrates are "machined" while the portions of the substrate underneath the vapor coated portions as replicated. Again, this arbitrary designation is illogical and incorrect.

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Nilsen teaches a vapor deposited metallic layer on portions of a structured surface. The structured surface is made by replication. However, using the Examiner's logic, the vapor deposited layer and the structured surface are both machined substrates/portions. As a result, the rejections of claims 16, 23 and 40 as being anticipated by Nilsen fails because it does not teach both a machined substrate/portion and a replicated substrate/portion.

(4) Applicant's have shown in their Appeal Brief that the term machined is defined in the specification. The Examiner argues that this definition is inadequate and that the specification discusses several different processes that end in the same "machined substrate/portion" which results in a discontinuous cube corner structure. Applicants traverse this interpretation.

A machined structure is not the same as a replicated structure. It has different physical characteristics than a replicated substrate as discussed at page 3-5 of Applicant's Brief. For the Examiner to argue otherwise is inconsistent with her arguments as discussed above. Moreover, these are terms commonly used and understood in the art to differentiate between the two types of surfaces.

#### CONCLUSION

For the foregoing reasons, appellants respectfully submit that the Examiner has erred in rejecting this application. Please reverse the Examiner on all counts.

Respectfully submitted,

January 4, 2005

Date

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